

INDIAN SCHOOL SOHAR  
FORMATIVE ASSESSMENT III 2013-14  
MATHEMATICS

Date: 06-11-13  
Class: VII

Marks: 25  
Time: 40 Minutes

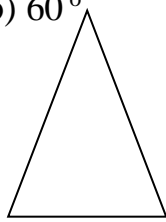
SECTION-A

(Each question carries 1 mark)

Fill up the blanks choosing the most suitable answers from the options given.

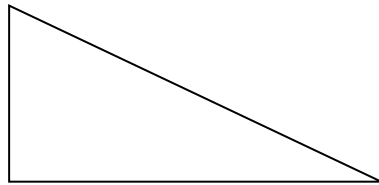
1. The value of  $x$  in the figure is .....

- a)  $150^\circ$       b)  $60^\circ$       c)  $75^\circ$       d)  $120^\circ$



2. The type of triangle given below is .....

- a) Acute angled      b) Obtuse      c) Isosceles      d) Right angled



3. If  $\triangle ABC \cong \triangle PQR$ , then .....

- a)  $\angle B = \angle Q$       b)  $AC = PR$       c)  $AB = QR$       d)  $\angle A = \angle R$

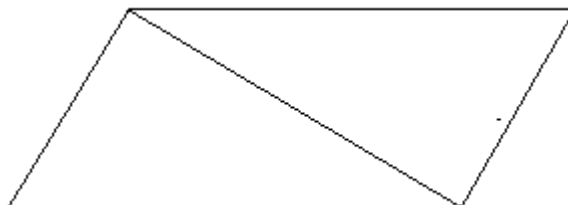
SECTION-B

(Each question carries 2 marks)

4. The triangles in the figure are congruent. Name the congruency condition used here. Write which one of the following congruency statements is true.

i)  $\triangle ABC \cong \triangle ADC$     ii)  $\triangle ABC \cong \triangle ACD$     iii)  $\triangle ABC \cong \triangle DCA$

iv)  $\triangle ABC \cong \triangle CAD$     v)  $\triangle ABC \cong \triangle DAC$     vi)  $\triangle ABC \cong \triangle CDA$

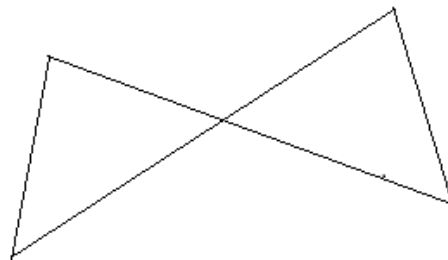


5. In  $\triangle ABC$ ,  $\angle C$  is a right angle.  $AC = 12\text{cm}$  and  $BC = 9\text{cm}$ . Find the length of side  $AB$ .
6. Can a triangle have sides  $10.2\text{cm}$ ,  $5.8\text{cm}$  and  $4.5\text{cm}$ ? Why or why not?
7. The sides of a rectangle are  $15\text{m}$  and  $8\text{m}$ . Find the length of its diagonal.

### SECTION-C

(Each question carries 3 marks)

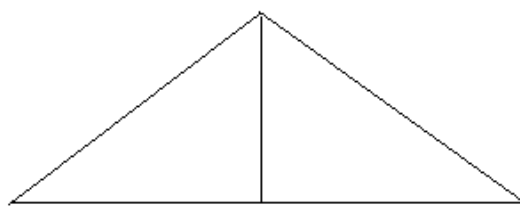
8. In right angled triangle  $ABC$  right angled at  $B$ ,  $AB = 40\text{ cm}$  and  $AC = 41\text{ cm}$ . Find the length of side  $BC$ .
9. In figure line segments  $AB$  and  $CD$  bisect each other at  $P$ . Name the congruency criterion by which  $\triangle APC \cong \triangle BPD$ . State the congruent parts used.



### SECTION-D

(Each question carries 4 marks)

10.  $\triangle PQR$  is isosceles with  $PQ = PR$ .  $S$  is the midpoint of  $QR$ .
  - i) Name the congruency criterion by which  $\triangle PQS \cong \triangle PRS$ .
  - ii) State the congruent parts used.
  - iii) Is  $\angle QPS = \angle RPS$ ? Why?
11. Ashok fixed a triangular tent of height  $3\text{m}$ . He tied the ends of the tents to two pegs fixed on the ground  $8\text{m}$  apart. What is the length of the tent from peg to peg?



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